Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

- 1. (Original) A honeycomb structure comprising a plurality of cells, each cell being surrounded by cell walls and functioning as a fluid passage, predetermined cells being plugged by a plugging material at one end face, remaining cells being plugged by the plugging material at the other end face, wherein a Young's modulus of the plugging material is lower than that of the cell wall.
- 2. (Original) The honeycomb structure according to claim 1, wherein a porosity of the plugging material is 97% or more with respect to a porosity of the cell wall.
- 3. (Original) The honeycomb structure according to claim 1, wherein a porosity of the plugging material is 105% or more with respect to a porosity of the cell wall.
- 4. (Currently Amended) The honeycomb structure according to any of claims 1 to 3 claim 1, wherein the porosity of the cell wall is 46% or more.
- 5. (Currently Amended) The honeycomb structure according to any of claims 1 to 4claim 1, wherein a thickness of the cell wall is 400µm or less.
- 6. (Currently Amended) The honeycomb structure according to any of claims 1 to 5claim 1, wherein a material for the cell wall is porous ceramic.

- 7. (Currently Amended) The honeycomb structure according to any of claims 1 to 6claim 1, wherein the plugging material comprises silicon carbide.
- 8. (Currently Amended) The honeycomb structure according to any of claims 1 to 7claim 1, wherein the predetermined cells plugged at one end face and the remaining cells plugged at the other end face are arranged alternately so as to form checkerboard patterns at the end faces.
- 9. (Original) A honeycomb structure comprising a plurality of cells, each cell being surrounded by cell walls and functioning as a fluid passage, predetermined cells being plugged by a plugging material at one end face, remaining cells being plugged by the plugging material at the other end face, wherein a strength of the plugging material is lower than that of the cell wall.
- 10. (Original) The honeycomb structure according to claim 9, wherein a porosity of the plugging material is 97% or more with respect to a porosity of the cell wall.
- 11. (Original) The honeycomb structure according to claim 9, wherein a porosity of the plugging material is 105% or more with respect to a porosity of the cell wall.
- 12. (Currently Amended) The honeycomb structure according to any of claims 9 to 11claim 9, wherein the porosity of the cell wall is 46% or more.
- 13. (Currently Amended) The honeycomb structure according to any of claims 9 to 12claim 9, wherein a thickness of the cell wall is 400μm or less.

- 14. (Currently Amended) The honeycomb structure according to any of claims 9 to 13claim 9, wherein a material for the cell wall is porous ceramic.
- 15. (Currently Amended) The honeycomb structure according to any of claims 9 to 14claim 9, wherein the plugging material comprises silicon carbide.
- 16. (Currently Amended) The honeycomb structure according to any of claims 9 to 15claim 9, wherein the predetermined cells plugged at one end face and the remaining cells plugged at the other end face are arranged alternately so as to form checkerboard patterns at the end faces.
- 17. (Original) A honeycomb structure comprising a plurality of cells, each cell being surrounded by cell walls and functioning as a fluid passage, predetermined cells being plugged by a plugging material at one end face, remaining cells being plugged by the plugging material at the other end face, wherein a porosity of the plugging material is 97% or more with respect to a porosity of the cell wall.
- 18. (Original) The honeycomb structure according to claim 17, wherein a porosity of the plugging material is 105% or more with respect to a porosity of the cell wall.
- 19. (Currently Amended) The honeycomb structure according to claim 17-or 18, wherein the porosity of the cell wall is 46% or more.

- 20. (Currently Amended) The honeycomb structure according to any of claims 17 to 19claim 17, wherein a thickness of the cell wall is 400μm or less.
- 21. (Currently Amended) The honeycomb structure according to any of claims 17 to 20claim 17, wherein a material for the cell wall is porous ceramic.
- 22. (Currently Amended) The honeycomb structure according to any of claims 17 to 21claim 17, wherein the plugging material comprises silicon carbide.
- 23. (Currently Amended) The honeycomb structure according to any of claims 17 to 22claim 17, wherein the predetermined cells plugged at one end face and the remaining cells plugged at the other end face are arranged alternately so as to form checkerboard patterns at the end faces.